ABSTRACT OF THE DISCLOSURE

[0040] The present invention relates to a process for carrying our gas-liquid countercurrent processing comprising passing the liquid material and the gas reactant in countercurrent flow through the fixed bed of catalyst in a reactor, characterized in that the fixed bed of catalyst includes two or more catalyst layers, with the difference of voidage between the adjacent catalyst layers being at least 0.05. The voidages of the catalyst layers can be increased or decreased in the direction of the flow of the liquid phase. The process of the invention can be effected with an increased range of gas-liquid ratio and an improved stability and flexibility.